THE SYLLIDAE (POLYCHAETOUS ANNELIDS) FROM JAPAN (VI) - DISTRIBUTION AND LITERATURE-

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THE SYLLIDAE (POLYCHAETOUS ANNELIDS) FROM JAPAN (VI)*

DISTRIBUTION AND LITERATURE

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With 4 Maps and 4 Tables

Distribution of Syllidae in the Uraga Strait at the entrance to Tokyo Bay

Tokyo Bay is situated on the Pacific coast of the central part of the Japanese main island, Honshu. The bay is embraced by two peninsulas, the Miura Peninsula on the west, and the Boso Peninsula on the east. It is connected with the open ocean at the mouth of Sagami Bay by a narrow strip of water, the Uraga Strait. A submerged gorge, known as the Tokyo Submarine Canyon, cuts the shelf deeply in the strait. However the canyon does not reach the main basin of Tokyo Bay and terminates rather abruptly midway in the strait, where it becomes narrower and shallower (330–100 m). The water in the Uraga Strait is much influenced by the coastal water of Tokyo Bay (HORIKOSHI, 1962).

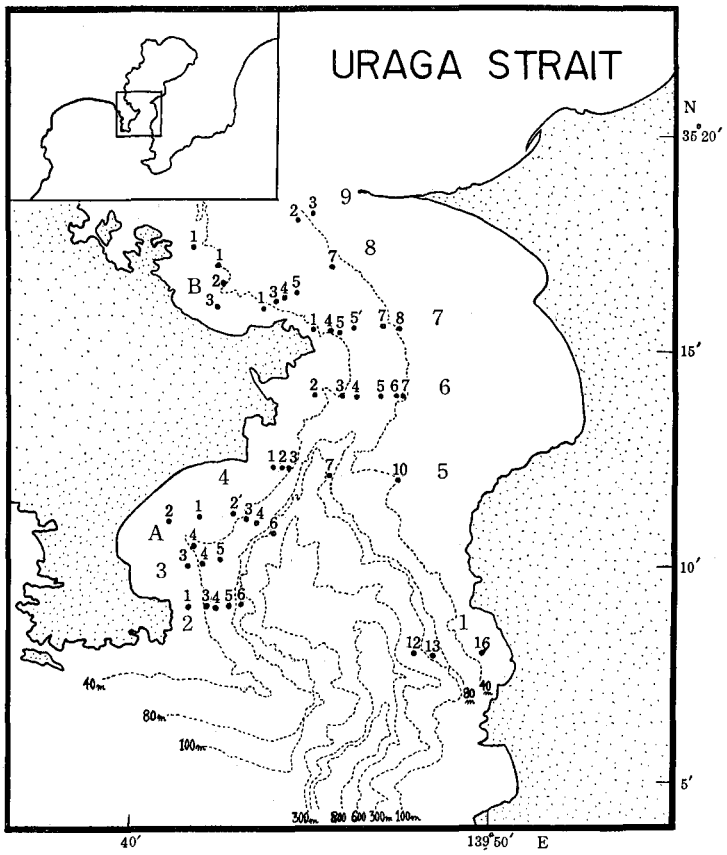
Surveys were made by Dr. M. HORIKOSHI, of the Ocean Research Institute, University of Tokyo to provide information on the benthonic communities of Tokyo Bay. 127 stations were taken in this area. The bottom samples obtained by dredging were washed in a sieve of 1 mm standard mesh and then classified into several animal groups. The syllids treated here are a part of the polychaetes in this collection; their occurrences at respective stations are indicated in Map 2. Eleven species were represented as follows (some damaged specimens which could not be identified at the level of species were excluded from these data):

Autolytus (Autolytus) dentalius
Odontosyllis fulgurans japonica
Pionosyllis uraga
Haplosyllis spongicola
Syllis spongiphila
Syllis gracilis

*) Continued from Part 5 (XIV (4), pp. 253-294).

Publ. Seto Mar. Biol. Lab., XIV (5), 351-368, 1967. (Article 23)

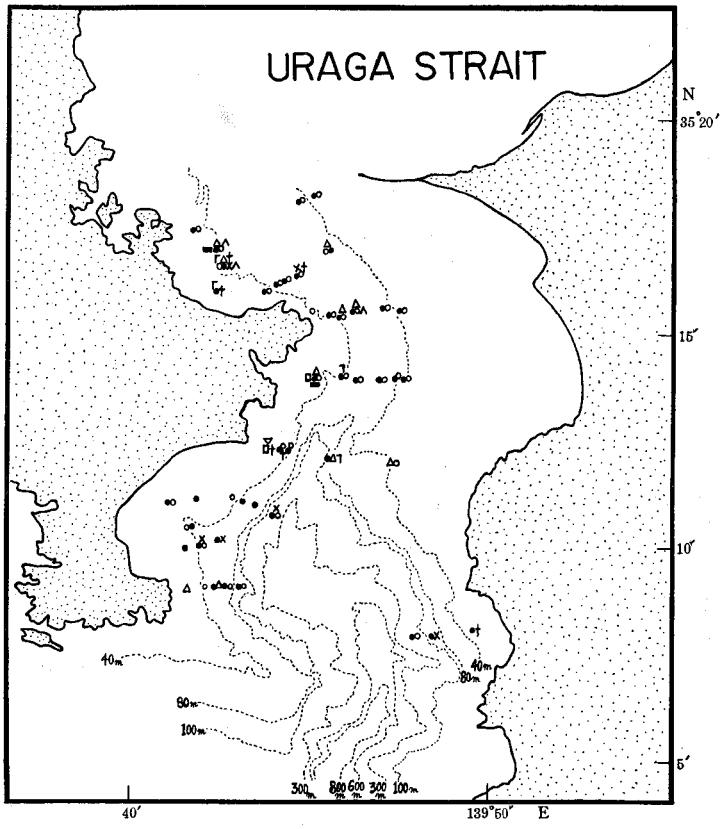
Langerhansia cornuta
Langerhansia japonica
Langerhansia rosea
Typosyllis aciculata orientalis
Typosyllis variegata



Map 2. Map of the Uraga Strait, showing the stations where syllids were collected.

Only one species was included in each of four genera: *Autolytus, Odontosyllis, Pionosyllis* and *Haplosyllis* (see above); they were distributed in 20 to 60 m depth. Eight of eleven species occurred at stations B-1,2,3, off Yokosuka City, in about 40 m. The most dominant syllids in this area were *Typosyllis variegata, Langerhansia cornuta* and *Typosyllis aciculata orientalis*. They are widely distributed through depths to 200 m.

Table II on page 354 and Map 3 indicate species names, their localities, and numbers of specimens.



Map 3. Records of Syllids in the Uraga Strait.

▽···*Autolytus (I.) dentalius*
+···*Odontosyllis fulgurans japonica*
×···*Pionosyllis uraga*
∧···*Haplosyllis spongicola*
┐···*Syllis spongiphila*
┌···*Syllis gracilis*
○···*Langerhansia cornuta*
□···*Langerhansia japonica*
■···*Langerhansia rosea*
△···*Typosyllis aciculata orientalis*
●···*Typosyllis variegata*

Table II. Species and their occurring numbers at stations in the Uraga Strait.

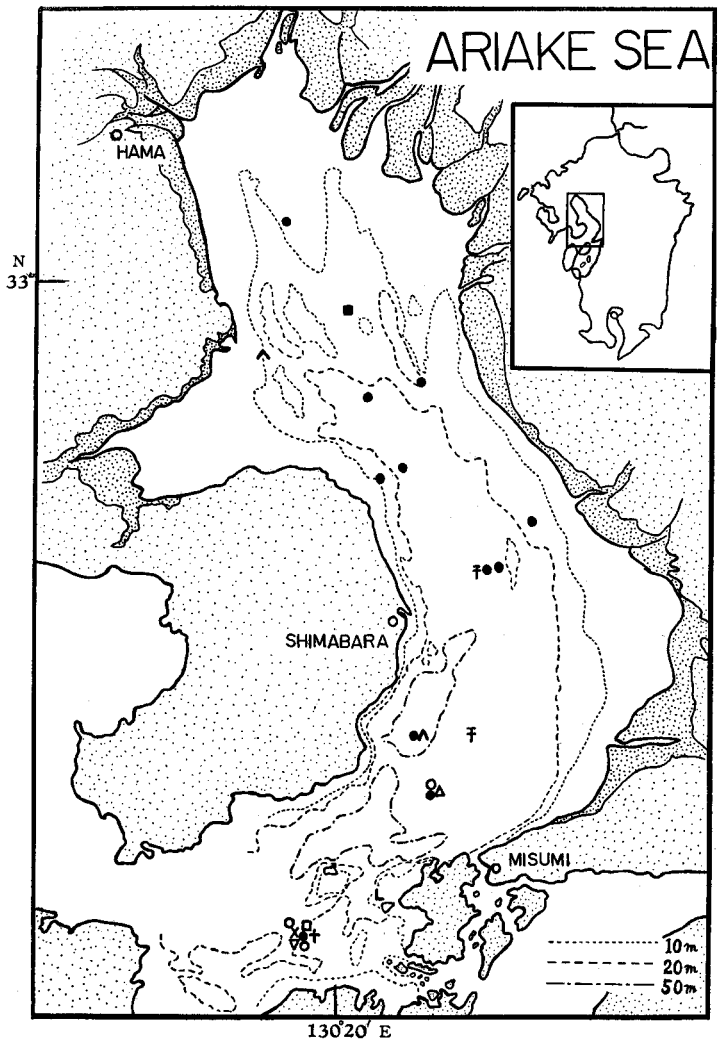
Species	Station and number of specimens
Autolytus (A.) dentalius	St. 5–1, (1).
Odontosyllis fulgurans japonica	St. B-2, (1); B-3, (2); 1–16, (1); 5–1, (1); 5–2, (1); 8–5, (1).
Pionosyllis uraga	St. B-2, (1); 1–13, (2); 3–4, (2); 3–5, (2); 4–6, (1); 8–5, (1).
Haplosyllis spongicola	St. B-1, (2); B-2, (8); 7–5′, (4).
Syllis spongiphila	St. 5–7, (1); 6–3, (2).
Syllis gracilis	St. B-2, (3); B-3, (4).
Langerhansia cornuta	St. A-2, (2); A-4, (2); B-1, (3); B-2, (2); 1–12, (1); 2–3, (7); 2–5, (4); 2–6, (2); 3–4, (1); 4–2′, (1); 4–6, (1); 5–2, (2); 5–3, (2); 5–10, (1); 6–2, (1); 6–3, (2); 6–4, (17); 6–5, (18); 6–6, (10); 6–7, (1); 7–1, (1); 7–4, (4); 7–5, (4); 7–5′, (1); 7–7, (6); 7–8, (3); 8–1, (1); 8–3, (30); 8–4, (7); 8–5, (3); 8–7, (4); 9–1, (4); 9–2, (7); 9–3, (1).
Langerhansia japonica	St. 5–1, (1); 6–2, (1).
Langerhansia rosea	St. B-1, (1); 6–2, (1).
Typosyllis aciculata orientalis	St. B-1, (8); B-2, (11); 2–1, (2); 2–4, (1); 5–7, (1); 5–10, (2); 6–2, (1); 7–5, (2); 7–5′, (7); 8–7, (1).
Typosyllis variegata	St. A-1, (3); A-2, (5); A-4, (2); B-1, (14); B-2, (36); B-3, (9); 1–12, (2); 1–13, (2); 2–3, (5); 2–4, (5); 2–5, (6); 2–6, (2); 3–3, (3); 3–4, (3); 3–5, (3); 4–3, (1); 4–4, (1); 4–6, (2); 5–2, (2); 5–3, (6); 5–7, (2); 6–2, (9); 6–3, (5); 6–4, (22); 6–5, (15); 6–6, (9); 6–7, (13); 7–4, (4); 7–5, (7); 7–5′, (19); 7–7, (8); 7–8, (3); 8–1, (1); 8–3, (33); 8–4, (18); 8–5, (18); 8–7, (5); 9–1, (5); 9–2, (11); 9–3, (1).

Distribution of Syllidae in the Ariake Sea

The Ariake Sea is a large embayment located on the western coast of Kyushu Island. It is confined by Shimabara Peninsula on the western side and separated from the open sea on its south-western side by Amakusa Island. It is continued southerly to the Yatsushiro Sea where many islets are scattered. In 1957–58, several series of dredgings were made by the Hama Experimental Station of the Seikai Regional Fisheries Research Laboratory to provide the data on the benthonic communities of this sea. Many polychaetes were collected; among them only the syllids are treated in this report. Eleven species are represented; the following table shows their occurrences at respective stations indicated in Map 4.

The surveys I to IV were made four times in two years; September, 1957…(I), December, 1957…(II), September, 1958…(III) and November, 1958…(IV), and the station number was repeatedly begun from 1 in each survey.

The following table indicates species names and their localities and number of specimens.



Map 4. Records of Syllids in the Ariake Sea.

∓…*Odontosyllis undecimdonta*
▽…*Syllis gracilis*
△…*Langerhansia rosea*
●…*Trypanosyllis (Trypanobia) asterobia*
○…*Typosyllis ehlersioides*
×…*Typosyllis variegata*
∧…*Haplosyllis spongicola tentaculata*
■…*Langerhansia cornuta*
⌊…*Trypanosyllis (Trypanedenta) taeniaformis*
+…*Typosyllis aciculata orientalis*
□…*Typosyllis fasciata*

Table III. Species and their occurring numbers at stations in the Ariake Sea.

Species	Locality and number of specimens
Odontosyllis undecimdonta	I-St. 18, (1); III-37, (2).
Haplosyllis spongicola tentaculata	I-24, (1); II-57, (1).
Syllis gracilis	III-58, (3).
Langerhansia cornuta	III-9, (3).
Langerhansia rosea	III-43, (1).
Trypanosyllis (Trypanedenta) taeniaformis	II-61, (1).
Trypanosyllis (Trypanobia) asterobia	I-18, (7); I-24, (9); II-22, (1); III-6, (1); III-14, (1); III-21, (1); III-43, (2); III-50, (1); IV-15, (4); IV-19, (5); IV-20, (1).
Typosyllis aciculata orientalis	III-50, (1).
Typosyllis ehlersioides	I-31, (1); II-70, (2); III-43, (1).
Typosyllis fasciata	III-50, (1).
Typosyllis variegata	III-50, (1).

Haplosyllis spongicola tentaculata (MARION, 1879) was first described from France and has also been recorded from the Gulf of Naples by COGNETTI (1954). This subspecies is new to Japan, and so far confined to the localities mentioned above.

Trypanosyllis (Trypanobia) asterobia OKADA (1933), first recorded at Misaki associated with an asteroid *Luidia quinaria*, was found at 11 stations; it is seemingly widely distributed in the Bay. At St. III–50 near the entrance of the Bay, the following four species were collected: *Trypanosyllis (T.) asterobia, Typosyllis variegata, Typosyllis aciculata orientalis* and *Syllis gracilis*.

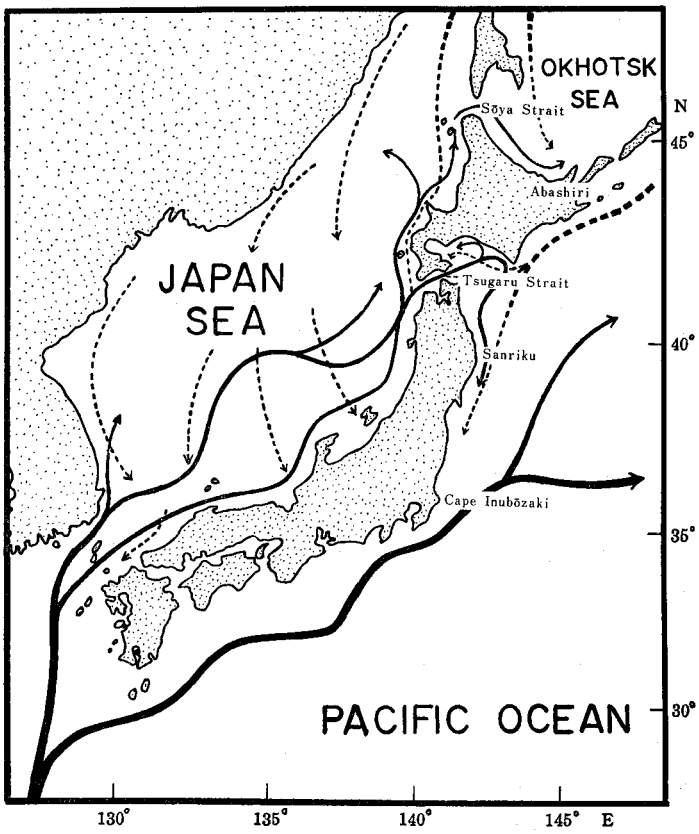
Geographic Distribution

Japan extends for nearly 20° degrees of latitude, from 26° to 45° North. The Japanese Islands, situated chiefly in the temperate region, are influenced by two strong warm currents; the Kuroshio current from the tropical seas flows along the Pacific coast, and its branch, the Tsushima current, along the Japan Sea coast. The northern region, Hokkaido Island and northern Honshu, is affected by two different currents: a warm current in summer and a cold current in winter.

The warm Kuroshio current flows up along the east coast of Honshu a little beyond the Cape Inubōzaki, then turns eastwards into the central part of the Pacific Ocean. In summer, the Tsushima current issues two or three branches just inside the entrance to the Japan Sea and near the western entrance to the Tsugaru Strait; main branches converge abruptly as they approach the Honshu coast and then the bulk of the water flows out to the Pacific Ocean through the strait. The water mass

to the Pacific flows first eastwards and then turns to the south along the Sanriku coast; this is called the Tsugaru current (NISHIMURA, 1964).

The peripheral stream of the Tsushima current extends north along the west coast of Hokkaido and eventually penetrates into the Okhotsk Sea through Sōya Strait, riding on the Sōya current, to Abashiri (see Map 5).



Map 5. Surface currents in winter and summer in the neighboring waters of Japan.

—— surface currents of warm-water in summer
····· surface currents of cold-water in winter

The cold Oyashio current and the Liman current are very prominent in the midwinter; these currents wash all coasts of Hokkaido, northern Honshu on the Pacific coast and all the Japan Sea coasts of Honshu.

These currents around Japanese Islands, thus, bring forth the unique interesting biological circumstances where the northern and southern faunas are mixing with each other.

The Japanese coasts have been divided into five areas. The first area includes Hokkaido Island, excluding its southwest coast; this is further subdivided into the Japan Sea coasts, the Okhotsk Sea and the Pacific coasts. The second area includes the coasts of the south-western end of Hokkaido and the northern end of Honshu comprising the Tsugaru Strait. The third area includes all of the coasts along the Japan Sea and Pacific Ocean, and further comprises the Seto Inland Sea; as the species from the Japan Sea coasts, only the specimens collected at Noto-ogi of the Noto Peninsula are represented in the present material. The fourth area comprises the Pacific coast of Shikoku, and the specimens from this area came from only Usa. The fifth area is represented by the southwestern coasts of Kyushu.

The syllids of Japan are here recorded with 86 species. The following breakdown is to illustrate the degree of endemism and some other distributional characteristics in Japan:

32 species and subspecies, or 37.2% of 86 species, have been previously recorded from Japan.
31 species and subspecies, or 36.0%, are newly described.
21 species and subspecies, or 24.4%, are newly added to the Japanese fauna.
2 species are not yet determined definitely.

The distribution of the Syllidae in the Japanese seas is influenced by those currents mentioned above, and resultantly the tropical and boreal species are differentiated. The list includes 16 species (or 18.6% of the whole species) from the whole coasts of Hokkaido excluding the southwestern coast, and 45 (or 52.3%) from the Tsugaru Strait, and 57 (or 66.2%) from the Pacific coast of Honshu, and 28 (or 32.5%) from the Seto Inland Sea, and 23 (or 26.7%) from the coasts of the Japan Sea, and 21 (or 24.4%) from the Pacific coast of Shikoku and 15 (or 17.4%) from Kyushu.

Autolytus (*Regulatus*) *vulgarius* and *Odontosyllis detecta* commonly distributed along Honshu Island are not found on the coast of Hokkaido; the warm water species, *Haplosyllis spongicola*, is distributed south of Onagawa through southern Japan. *Autolytus* (*R.*) *prismaticus*, a boreal form, occurs only in Hokkaido and northern Honshu. The following eight species of *Autolytus*, *A.* (*Autolytus*) *irregularis*, *A.* (*A.*) *japonensis*, *A.* (*A.*) *tsugarus*, *A.* (*A.*) *magnus*, *A.* (*Regulatus*) *nipponensis*, *A.* (*R.*) *n. longicirratus*, *A.* (*R.*) *boreatus* and *A.* (*R.*) *alternata* are found only in the Tsugaru Strait, from the intertidal zone to 360 m.

The following four species of *Autolytus*, *A.* (*A.*) *pentadentatus*, *A.* (*A.*) *spinoculatus*, *A.* (*R.*) *kiiensis* and *A.* (*R.*) *setoensis* are collected only at Seto, Wakayama-prefecture.

The commoner species are: *Sphaerosyllis hirsuta*, *Odontosyllis undecimdonta*, *Trypanosyllis* (*Trypanedenta*) *taeniaformis*, *Typosyllis nipponica*, *Typosyllis alternata*, *Typosyllis aciculata orientalis*, *Typosyllis adamanteus kurilensis*, *Typosyllis ehlersioides* and *Typosyllis variegata*.

Table IV. Distribution of syllids in Japan.

Regions / Names of Species	Hokkaido			Tsugaru Strait		Honshu									Shikoku	Kyushu		
						Pacific coast						Seto Inland Sea		Coast of Japan Sea				
	Coast of Okhotsk Sea	Coast of Pacific Ocean	Coast of Japan Sea	Hokkaido side (Shirikishinai and others)	Honshu side (Asamushi)	Onagawa	Misaki	Uraga Strait	Sagami and Suruga Bays	Sugashima	Seto	Tamano	Mukaishima	Noto-ogi	Usa	Amakusa	Ariake Sea	Ohmura Bay
EXOGONINAE																		
Brania clavata					+						+			+				
Exogone gemmifera			+		+								+					
Exogone verugera					+						+			+	+			
Exogone uniformis																		+
Sphaerosyllis erinaceus			+															
Sphaerosyllis hirsuta		+	+		+	+				+	+	+		+				
AUTOLYTINAE																		
Autolytus (Autolytus) pentadentus											+							
Autolytus (A.) spinoculatus											+							
Autolytus (A.) irregularis				+														
Autolytus (A.) dentalius								+										
Autolytus (A.) japonensis				+														
Autolytus (A.) tsugarus				+														
Autolytus (A.) magnus				+														
Autolytus (A.) tamanus												+						
Autolytus (Regulatus) convolutus					+													
Autolytus (R.) cornutus						+												
Autolytus (R.) prismaticus				+	+	+												
Autolytus (R.) okadai					+	+						+						
Aulolytus (R.) kiiensis											+							
Autolytus (R.) vulgarius					+	+	+			+	+	+	+	+	+			
Autolytus (R.) misakiensis						+	+											
Autolytus (R.) misakiensis longilappetus						+												
Autolytus (R.) usaensis												+			+			
Autolytus (R.) setoensis											+							
Autolytus (R.) noroi				+	+	+					+	+	+	+	+			
Autolytus (R.) nipponensis				+														
Autolytus (R.) nipponensis longicirratus				+														
Autolytus (R.) mukaishimus													+					
Autolytus (R.) boreatus				+														
Autolytus (R.) alternata				+														

(Continued)

Regions / Names of Species	Hokkaido			Tsugaru Strait		Honshu										Shikoku	Kyushu		
						Pacific coast						Seto Inland Sea		Coast of Japan Sea					
	Coast of Okhotsk Sea	Coast of Pacific Ocean	Coast of Japan Sea	Hokkaido side (Shirikishinai and others)	Honshu side (Asamushi)	Onagawa	Misaki	Uraga Strait	Sagami and Suruga Bays	Sugashima	Seto	Tamano	Mukaishima	Noto-ogi		Usa	Amakusa	Ariake Sea	Ohmura Bay
Autolytus sp. *Polybostrichus* stage				+															
Myrianida pachycera							+				+			+		+	+		
Autosyllis japonica				+															
EUSYLLINAE																			
Amblyosyllis speciosa				+	+	+	+			+	+	+		+		+			
Dioplosyllis japonica				+															
Eusyllis irregulata				+								+							
Eusyllis blomstrandi				+															
Eusyllis longicirrata											+	+	+			+			
Eusyllis habei												+	+	+					
Eusyllis inflata						+			+		+		+					+	+
Eusyllis japonica				+															
Odontosyllis maculata		+		+	+	+	+										+		
Odontosyllis detecta					+		+			+	+	+	+			+			
Odontosyllis setoensis											+								
Odontosyllis fulgurans japonica								+											
Odontosyllis undecimdonta		+	+	+		+	+									+	+	+	
Syllides japonicus			+											+					
Pionosyllis uraga								+											
SYLLINAE																			
Haplosyllis anthogorgicola											+								
Haplosyllis spongicola						+		+		+	+	+	+	+		+			
Haplosyllis spongicola tentaculata																		+	
Opisthosyllis viridis											+	+	+	+		+			
Opisthosyllis japonica							+						+	+		+			
Opisthosyllis longicirrata											+								
Opisthosyllis brunnea			+																
Geminosyllis ohma				+															
Trypanosyllis (*Trypanosyllis*) *coeliaca nipponica*				+															
Trypanosyllis (*Trypanedenta*) *gemmipara*	+			+							+								
Trypanosyllis (*T.*) *taeniaformis*			+	+	+	+	+			+	+	+	+	+		+		+	

(Continued)

Regions / Names of Species	Hokkaido			Tsugaru Strait		Honshu										Shikoku	Kyushu		
						Pacific coast						Seto Inland Sea		Coast of Japan Sea					
	Coast of Okhotsk Sea	Coast of Pacific Ocean	Coast of Japan Sea	Hokkaido side (Shirikishinai and others)	Honshu side (Asamushi)	Onagawa	Misaki	Uraga Strait	Sagami and Suruga Bays	Sugashima	Seto	Tamano	Mukaishima	Noto-ogi		Usa	Amakusa	Ariake Sea	Ohmura Bay
Trypanosyllis (*Trypanobia*) *depressa*				+															
Trypanosyllis (*T.*) *asterobia*							+											+	
Syllis amica					+					+	+	+	+			+			
Syllis gracilis								+									+	+	
Syllis spongiphila				+				+											
Syllis ramosa									+										
Parasphaerosyllis ezoensis		+	+			+					+			+					
Parasphaerosyllis setoensis											+								
Langerhansia cornuta				+				+			+	+						+	
Langerhansia rosea								+		+			+	+		+			
Langerhansia japonica								+											
Langerhansia sp.											+								
Typosyllis nipponica	+	+	+	+	+	+	+			+	+	+	+	+		+			
Typosyllis okadai											+								
Typosyllis hyalina		+	+			+								+					
Typosyllis alternata	+	+	+								+	+	+			+			
Typosyllis aciculata orientalis	+	+	+	+	+	+	+	+		+	+	+	+	+		+	+	+	+
Typosyllis fasciata				+														+	
Typosyllis adamanteus kurilensis		+	+	+						+		+	+						
Typosyllis maculata											+			+					
Typosyllis ehlersioides		+	+	+			+	+		+	+	+		+		+	+	+	
Typosyllis lunaris											+								
Typosyllis setoensis											+								
Typosyllis monilata							+							+					
Typosyllis regulata											+								
Typosyllis variegata		+	+	+	+	+		+		+	+	+	+	+		+	+	+	
Typosyllis prolifera				+		+				+	+		+	+		+	+	+	

The Japanese syllids may be classified as follows according to their distributions:

46 species and subspecies, or 53.4% of the whole species, are known only from Japan.
8 species, or 9.3%, are known also from the Yellow Sea.
10 species, or 11.6%, are common to the Indo-Pacific areas.
17 species and subspecies, or 19.8%, are known also from the Okhotsk, the Bering and the north Japan Seas.
14 species, or 16.2%, are known also from the South and North Americas.
3 species, or 3.4%, are known from the circumpolar area.
14 species and subspecies, or 16.2%, are known also from the Mediterranean Sea.
22 species and subspecies, or 25.5%, are known also from the Atlantic Ocean.
4 species, or 4.6%, are cosmopolitan.
8 species, or 9.3%, are known also from Australia.
4 species, or 4.6%, are known also from Africa.
4 species, or 4.6%, are known also from the Red Sea.

These data are shown in detail in the following table:

Table V. List of syllids in Japan, with distributional data.

Regions / Names of Species	Limited to Japan	Yellow Sea	Indo-Pacific areas	Okhotsk, Bering Seas and north Japan Sea	South and North Americas	Circumpolar	Mediterranean Sea	Atlantic Ocean	Cosmopolitan	Australia	Africa	Red Sea
EXOGONINAE												
Brania clavata		+		+	+		+	+	+			
Exogone gemmifera		+		+	+	+	+	+	+			
Exogone verugera				+	+		+	+	+	+	+	
Exogone uniformis					+							
Sphaerosyllis erinaceus		+		+		+	+	+				
Sphaerosyllis hirsuta				+	+							
AUTOLYTINAE												
Autolytus (Autolytus) pentadentus	+											
Autolytus (A.) spinoculatus	+											
Autolytus (A.) irregularis	+											
Autolytus (A.) dentalius								+				
Autolytus (A.) japonensis	+											
Autolytus (A.) tsugarus	+											
Autolytus (A.) magnus				+	+							
Autolytus (A.) tamanus	+											
Autolytus (Regulatus) convolutus							+					
Autolytus (R.) cornutus								+				
Autolytus (R.) prismaticus				+	+	+		+				
Autolytus (R.) okadai				+								
Autolytus (R.) kiiensis	+											

(Continued)

Regions / Names of Species	Limited to Japan	Yellow Sea	Indo-Pacific areas	Okhotsk, Bering Seas and north Japan Sea	South and North Americas	Circumpolar	Mediterranean Sea	Atlantic Ocean	Cosmopolitan	Australia	Africa	Red Sea
Autolytus (R.) vulgarius	+											
Autolytus (R.) misakiensis	+											
Autolytus (R.) misakiensis longilappetus	+											
Autolytus (R.) usaensis	+											
Autolytus (R.) setoensis	+											
Autolytus (R.) noroi	+											
Autolytus (R.) nipponensis	+											
Autolytus (R.) nipponensis longicirratus	+											
Autolytus (R.) mukaishimus	+											
Autolytus (R.) boreatus	+											
Autolytus (R.) alternata	+											
Autolytus sp. *Polybostrichus* stage	+?											
Myrianida pachycera										+		
Autosyllis japonica	+											
EUSYLLINAE												
Amblyosyllis speciosa	+											
Dioplosyllis japonica	+											
Eusyllis irregulata	+											
Eusyllis blomstrandi				+			+	+				
Eusyllis longicirrata	+											
Eusyllis habei	+											
Eusyllis inflata		+								+		
Eusyllis japonica	+											
Odontosyllis maculata		+		+								
Odontosyllis detecta										+		
Odontosyllis setoensis	+											
Odontosyllis fulgurans japonica	+											
Odontosyllis undecimdonta	+											
Syllides japonicus	+											
Pionosyllis uraga	+											
SYLLINAE												
Haplosyllis anthogorgicola	+											
Haplosyllis spongicola			+		+		+	+				
Haplosyllis spongicola tentaculata							+					
Opisthosyllis viridis								+				

(Continued)

Region / Names of Species	Limited to Japan	Yellow Sea	Indo-Pacific areas	Okhotsk, Bering Seas and north Japan Sea	South and North Americas	Circumpolar	Mediterranean Sea	Atlantic Ocean	Cosmopolitan	Australia	Africa	Red Sea
Opisthosyllis japonica	+											
Opisthosyllis longicirrata			+									
Opisthosyllis brunnea								+				
Geminosyllis ohma	+											
Trypanosyllis (Trypanosyllis) coeliaca nipponica	+											
Trypanosyllis (Trypanedenta) gemmipara			+	+	+			+				
Trypanosyllis (T.) taeniaformis			+							+		
Trypanosyllis (Trypanobia) depressa										+		
Trypanosyllis (T.) asterobia	+											
Syllis amica							+	+				
Syllis gracilis			+		+		+	+			+	
Syllis spongiphila				+	+			+				
Syllis ramosa			+									
Parasphaerosyllis ezoensis	+											
Parasphaerosyllis setoensis	+											
Langerhansia cornuta		+	+				+	+				
Langerhansia rosea								+				
Langerhansia japonica	+											
Langerhansia sp.	+											
Typosyllis nipponica	+											
Typosyllis okadai			+									
Typosyllis hyalina					+		+	+				
Typosyllis alternata				+	+							
Typosyllis aciculata orientalis								+				
Typosyllis fasciata		+		+				+				
Typosyllis adamanteus kurilensis				+								
Typosyllis maculata	+											
Typosyllis ehlersioides				+								
Typosyllis lunaris	+											
Typosyllis setoensis	+											
Typosyllis monilata	+											
Typosyllis regulata										+		
Typosyllis variegata		+	+	+	+		+	+	+	+	+	
Typosyllis prolifera			+				+	+				

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